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# Combat Search And Rescue: A Lesson We Fail To Learn

A Monograph  
by  
Major Rickey L. Rife  
Aviation



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# ABSTRACT

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Combat Search and Rescue is an emotional, often controversial issue with historical roots over fifty years old. From its inception in World War II through current force structure capability, CSAR has been the victim of diminishing budgets, leadership apathy, and decreasing resources. Joint doctrine is flawed, there is duplication of effort resulting in wasted manpower and resources, no centralized direction, and little interoperability. Service parochialism also impedes attempts to resolve this critical problem.

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## INTRODUCTION

"Those of us not rescued in Vietnam but fortunate enough to survive the rigors and anguish of prisoner internment know first hand the costs of inadequate combat search and rescue- costs measured in human spirit, morale, lives, and dollars. Difficult as it may be to project those costs precisely, it is predictable that the costs in possible future conflicts will greatly exceed those of past wars unless actions are taken to accord a high peacetime priority to the combat search and rescue mission."<sup>1</sup>

In the landmark Goldwater-Nichols Department of Defense Reorganization Act of 1986, Congress concluded that the employment of military force was strictly a joint matter. The services were confined to organizing, training, and equipping their forces for designated joint commands. Also included in the act was a requirement for the Chairman of the Joint Chiefs of Staff to submit to the Secretary of Defense recommendations for any changes in the roles, missions, and functions of the individual services.<sup>2</sup>

The second report in accordance with the Act was submitted by General Colin Powell in February 1993. Within the Chairman's Report on the Roles, Missions, and Functions of the Armed Forces of the United States, the issue of Combat Search and Rescue (CSAR) procedures stated; "combat search and rescue procedures have not kept up with joint operational doctrine as each Service independently developed its CSAR program.

During the Persian Gulf War a CSAR capability was pieced together to meet battlefield requirements".<sup>3</sup> Despite acknowledging that finding and rescuing downed flight crews or other forces trapped behind enemy lines is "a task of the greatest importance", and the problems encountered in providing an effective CSAR capability during Desert Shield/Storm, the recommendation remained for all four services to retain responsibility for CSAR operations. This strategy of relying on standardized joint doctrine, tactics, and organization to conduct CSAR operations is the same one employed prior to the Gulf War; it proved dysfunctional for Desert Storm and

remains so today. There is no unity of effort (only duplication), little interoperability, few modernized systems, and limited training conducted in each service. Combat Search and Rescue operations are further complicated during combined operations where differences in capabilities among allied military forces increases coordination and liaison difficulties.

The United States National Military Strategy has evolved from containing the spread of communism and deterring Soviet aggression to a more diverse, flexible strategy which is regionally oriented and capable of responding decisively to the challenges of this decade.<sup>4</sup> This strategy is built upon four foundations: forward presence, crisis response, deterrence and defense, and reconstitution.<sup>5</sup> It recognizes the requirement for force projection and the reality that contingency operations will characterize future conflicts.

Inherent within this strategy is the requirement to rapidly introduce overwhelming military force to achieve conflict resolution with minimum loss of life. This generally entails a theater CINC receiving contingency force packages tailored into joint task forces to capitalize on the unique capabilities of each service.<sup>6</sup> A powerful, quick response force that a theater CINC may initially employ is air power, either maritime or land based. An effective air campaign requires the theater CINC to have a CSAR force that can be rapidly introduced into the theater with trained crews flying properly equipped rescue aircraft capable of executing the difficult CSAR mission. The CINC does not need an "ad hoc", ill-equipped organization, with slow response times that is more of a liability than an asset.

Preventing the capture and exploitation of downed aircrews is a national interest which a theater CINC must weigh heavily before committing air assets. The impact on American public opinion when

prisoners of war, their families, and "subject matter experts" appear on national media networks, is critical and can adversely effect military options. This is an aspect of the campaign that a theater CINC can not afford to neglect or disregard.

The National Military Strategy also clearly states that, "It is certain that US military forces will be called upon again". It goes on to say that the US and its allies will be called upon "to mediate economic and social strife and to deter regional aggressors".<sup>7</sup> If the U.S. military enters another conflict in the near future, and air power is expected to play an important role, then a viable CSAR program is essential. Currently, a CSAR capability is only resident in the United States Air Force Air Rescue Service. Joint CSAR doctrine is deficient, resources are not properly husbanded, and ultimately the theater CINC is left without a viable rescue capability.

This paper examines the history of CSAR, current service and joint doctrine, equipment, organization, and training. It evaluates why this critical capability essentially no longer exists in any service, why the Aerial Rescue Service was unable to respond to rescue requirements in the Gulf War, and why the CSAR mission continues to lose the battle of the budget. History clearly illustrates that Combat Search and Rescue is a lesson we refuse to learn. A proposed alternative solution to the CINC's dilemma is recommended.

### HISTORY

Combat Search and Rescue is a specific task performed by rescue forces to effect the recovery of distressed personnel during wartime or contingency operations.<sup>8</sup> The historical background of CSAR or "strike rescue" as the Navy calls it, is filled with lessons that

were continually ignored and relearned through the loss of life and equipment.

Combat Search and Rescue development has naturally paralleled the growth and tactical employment of the airplane. Although there were isolated air engagements at the outset of WWI, it was not until mid-1916 when Anthony Fokker developed an interrupter gear synchronized so that a machine gun could shoot through the propeller arc that command of the air became a necessity of war.<sup>9</sup> CSAR development was blocked during this time (in fact, there is no information to suggest that the concept was under consideration) because Allied leaders refused to allow their pilots to wear parachutes. They believed that parachutes would make pilots reluctant to try to save their planes if they could easily abandon them. Hundreds of young men suffered horrible deaths by burning or crashing because of this policy.<sup>10</sup>

## WORLD WAR II

It was not until just prior to World War II that search and rescue operations became an important aspect of air combat. The Germans first pioneered aircrew rescue in the Luftwaffe when Lt. Col. Konrad Glotz assumed administrative responsibility for several boats at Kiel, in 1935, and began recovering downed aircrews. In 1939, the Germans modified fourteen of their float planes specifically for the air-sea rescue mission. Medical equipment, respirators, electrically heated sleeping bags, a floor hatch with a collapsible ladder, and a hoist to lift the injured were standard rescue equipment configurations on these aircraft. They were also painted white and marked conspicuously with the Red Cross insignia.<sup>11</sup> The *Seenotdienst* (air-sea rescue service) expanded as Germany conquered Europe; however, it remained primarily a sea rescue

service organized along the coast providing rapid recovery of downed aircrews- German as well as British.<sup>12</sup>

The Germans also pioneered the development of rescue equipment including inflatable dinghies, fluorescein dye to stain the sea, and large floats supplied with blankets, dry clothing, food, water, flares and lamps.<sup>13</sup> German preemptive planning for search and rescue contrasts sharply with the British indiscriminate approach and the American total disregard for an air-sea rescue service.

The British Royal Air Force depended upon "high-speed boats, any surface vessels that were in the vicinity, and whatever aircraft might be available either from the Coastal Command or the home squadron of the missing plane".<sup>14</sup> This uncoordinated, haphazard system resulted in the loss of 220 men killed or missing between July and August 1940. As the Battle of Britain continued, out of a total of about 1000 trained pilots, more than twenty-five percent were lost. Winston Churchill wrote, "Their places could only be filled by 260 new, ardent, but inexperienced pilots drawn from training units, in many cases before their courses were completed".<sup>15</sup> Development of a coordinated, coherent approach to CSAR became a national priority.<sup>16</sup> To offset these losses a plan to coordinate rescue efforts was drafted in August 1940. "The result was the establishment of a joint RAF/Royal Navy rescue organization, with the RAF responsible for organizing and performing aerial searches and the Navy for making the actual recovery".<sup>17</sup>

In 1941, responsibility for rescue operations was centralized under the Air Officer, Commander in Chief, Coastal Command. The result of centralized command and an increasing interest in rescue training was reflected in a greatly improved record of recovery. Between February and August 1941, of the 1200 aircrew members who went down in the Channel or North Sea, 444 were saved. An additional 78 were picked up by the *Seenotdienst*.<sup>18</sup>

The United States entered World War II without specific plans, organization, doctrine, or equipment for CSAR. We were, however, able to learn from our allies' experiences, and initially modeled much of our training on British doctrine. In addition, to preclude duplication of effort, air-sea rescue in the North Sea and the English Channel remained the responsibility of the United Kingdom. By September 1944, 90 percent of American aircrews stationed in Britain who were downed at sea were recovered.<sup>19</sup>

The individual services were responsible for training their aircrews in survival techniques and for providing them with the appropriate equipment. On land, with no rescue procedures defined, any search for a missing aviator was conducted in a random fashion.<sup>20</sup> Because most of the flying in World War II was conducted over water--both the Atlantic and Pacific theaters of war--the concepts and capabilities developed for search and rescue operations primarily focused on water recovery. Navy surface vessels, planes, and submarines recovered many Army and Navy aircrews.<sup>21</sup>

It was not until 1943 that land rescue began receiving increased attention as a result of the China-Burma-India theater of war where most of the aerial fighting was over jungle and mountainous terrain. Initially, until introduction of the first squadron of helicopters, rescues were accomplished by travel overland to the crash site. If all went well, the downed crewmember was rescued in a matter of a few days.<sup>22</sup>

The first squadron of helicopters used in rescue operations, the 8th Emergency Rescue Squadron, was formed in China, in May 1945. This squadron had the exclusive mission of performing rescue operations on land. In the first six months of operation, 110 land rescue missions were attempted and 43 airmen were saved.<sup>23</sup> The development of the helicopter came too late in the war to have a significant impact, but the implications for the future were

immense.<sup>24</sup>

Through the course of World War II the role of CSAR grew from its infancy to an organized capability in each service. This closely paralleled CSAR development of other nations who were also making great strides in filling this critical operational void. Rescue chances increased from near zero at the beginning of the war to forty-three percent by April 1943.<sup>25</sup> By the end of the war the United States had a well coordinated joint and combined CSAR organization which resulted in the rescue of nearly 5000 Army Air Force crew members.<sup>26</sup> When the final B-29 strike was flown against Japan, roughly one quarter of those involved manned the vessels, submarines, and aircraft of the rescue force.<sup>27</sup>

"The question of rescue responsibility emerged after the war."<sup>28</sup> The US Coast Guard, supported by the Navy, claimed that air-sea rescue had traditionally been its responsibility; the Army Air Force, on the other hand, believed that its air rescue capability should be expanded to meet the increasing scope of air power. On 13 March 1946, the Army's Air Transport Command reorganized its rescue forces to satisfy peacetime search and rescue responsibilities on land; the Coast Guard assumed peacetime SAR responsibility along coastal waterways and at sea. This delineation of responsibility and subsequent reorganization led to the establishment of the Air Rescue Service and its assignment to the Air Transport Command, effective 1 April 1946.<sup>29</sup>

The Air Rescue Service was, unfortunately, conceived at a time of budget cuts and military reductions. Operation Wring Out (1958), the USAF force structure drawdown, in addition to equipment shortages and overseas base closures following World War II, compelled the ARS to consolidate its organization. The result was a significant decrease in rescue capabilities.

This period of atrophy in CSAR capability was characteristic of

each service, which, at the conclusion of World War II, had independently refined its own CSAR organization, doctrine, and training programs.

### KOREAN WAR

The United States entered the Korean War with a CSAR structure in place, but without adequate equipment, training, and doctrine necessary to perform the mission. CSAR importance increased significantly as airpower developed into a dominant force focused throughout the theater of operations. Unfortunately, four years of neglect had to be rapidly overcome. This difference in readiness and capability requirements was overcome through time, but at great expense in aircrew lives. Equipment such as the helicopter, which had demonstrated potential at the close of WWII, was soon validated under fire in Korea.

Initially, helicopters were used to evacuate critically wounded soldiers, move supplies, and spot for artillery before evolving into downed pilot recovery. Deep interdiction targeting required the unique capabilities of the helicopter to effect rescues. The first of many successful aircrew rescue operations behind enemy lines was conducted on 4 September 1950.<sup>30</sup> From this auspicious beginning helicopters became the mainstay of the CSAR effort throughout the war. They were positioned well forward to support ground operations, or pre-positioned on islands (Paengnyong-do and Cho-do) near aircraft bailout zones to provide rapid recovery. Aircrew recoveries behind enemy lines were impressive (when compared to World War II)-

"Between June 1950 and July 1953, 1690 USAF crewmembers went down inside enemy territory. The Air Rescue Service saved 170 (ten percent: 102 by helicopters, 66 by SA-16 amphibians, and 2 by liaison planes. . . Within friendly territory, ARS picked up 86 aircrewmembers".<sup>31</sup>

The ARS contribution to the air war over Korea was considerable. As Earl H. Tilford notes; "The Air Rescue Service had survived its baptism under fire and emerged with an enviable reputation".<sup>32</sup> Helicopter vulnerability to small arms fire, limited endurance, and restricted maximum gross weight limitations were factors which made rescue operations behind enemy lines precarious. These limitations, however, were being quickly overcome by the introduction of newer, more powerful airframes when the war ended.

At the conclusion of the Korean war, with its concomitant decrease in the defense budget, service CSAR capability once again endured force structure reductions, equipment realignment, and training erosion; all of which greatly limited mission readiness. This downward trend in CSAR capability was not arrested until the Vietnam War. The USAF Air Rescue Service, for example, went from a 7,900 man force organized in fifty squadrons in 1954, to eleven squadrons (1600 men) in 1961.<sup>33</sup>

In this period of declining resources the mission of the Air Rescue Service expanded to a global responsibility- primarily focused on peacetime SAR. In fact, Air Force policy limited aircrews to peacetime training requirements, and further directed that no special equipment would be purchased by the ARS for the role. To satisfy increased mission expectations with reduced resources the USAF decided to reorganize the ARS. An Air Rescue Service directive for reorganization published on September 25, 1958 stated:

"ARS will be organized, manned, equipped, trained, and deployed to support peacetime air operations. No special units or specially designed aircraft will be provided for the sole purpose of wartime search and rescue (SAR). Wartime rescue operations will be dictated by the capabilities of equipment used for peacetime SAR, and will be conducted in accordance with JANAF (Joint Army, Navy, Air Force) and standard wartime SAR procedures".<sup>34</sup>

As a result, Air Rescue Service capability continued to decline in the period of interwar years between Korea and Vietnam. Concentration of support for the national space effort, emphasis on peacetime search and rescue, and no official wartime mission left the ARS without a viable rescue capability at the outset of the Vietnam War. In fact, the ARS transferred most of their helicopters to other service components, because they were unable to meet global requirements.<sup>35</sup>

Essentially, the services abandoned Combat Search and Rescue as a mission, forcing the repeat of painful lessons learned in just ten years. These lessons were to cost more when the relatively permissive environments of Korea and World War II were replaced with the increased air defense threat of Vietnam.

#### VIETNAM

In December 1961, a covert search and rescue center was established at Tan Son Nhut Air Base to coordinate SAR operations in Vietnam. Initially, the ARS was precluded from entering the country in order to limit the magnitude of U.S. involvement in Vietnam. It was not until April 1962, as the pace of air operations (and aircraft losses) increased, that Detachment 3 (eventually becoming the 38th Air Rescue Squadron), Pacific Air Rescue Service was officially established. Although formally present, at least in name, there were few resources available. The ARS was able to overcome some limitations through agreement with the Army to borrow helicopters- provided they weren't needed elsewhere.<sup>36</sup>

Rescue operations were also enhanced through the Joint Vietnamese/U.S. Search and Rescue Agreement in 1962, which outlined recovery responsibilities in the Republic of Vietnam. This, however, did little to meet the deficiencies in trained recovery

personnel and equipment that were so desperately required. Vietnam also saw the introduction of surface-to-air missiles and concentrated antiaircraft artillery, both of which complicated CSAR operational success. As threat system lethality increased, CSAR operations were modified to ensure a survivable rescue capability.

Vietnam was also a period of tremendous CSAR innovation and growth, particularly equipment. Items such as the jungle penetrator, a helicopter "cockpit" trainer for emergency egress training, improved mobile communications equipment, homing devices, litter baskets, enhanced medical kits, and tremendous strides in helicopter development grew from obstacles encountered in Vietnam. Many of the same obstacles encountered in Korea a decade earlier.

Over the course of the war search and rescue tactics and doctrine evolved to satisfy mission requirements. It was not until 1965, that major doctrinal problems were solved with the adoption of the combat rescue task force. The Search and Rescue Task Force, SARTF, combined Tactical Air Force assets (Forward Air Controller, Combat Air Patrol, Close Air Support, orbiting C2 platforms, and air refueling tanker support) with armed recovery helicopters. It was generally abandoned following Vietnam due to the increased lethality of air defenses, enhanced night flying capability, and a decreasing apportionment of dedicated rescue support air strike assets. Storm.<sup>37</sup>

Although the Air Rescue Service was established to coordinate Search and Rescue operations; "there never was a single unified rescue command that controlled rescue operations, doctrine, training, and equipment. Rather, each service developed its own capability".<sup>38</sup> The problem was further exacerbated because the ARS had no official wartime mission.

In May 1964, a directive from the Joint Chiefs of Staff finally ordered the formal introduction of search and rescue forces into

Southeast Asia. Despite this and intensive crew training before arrival in Vietnam; "the rescue mission continued to suffer from inadequate forces, nonexistent doctrine, and ill-suited aircraft. Moreover, Air Rescue Service leaders knew that rescue had failed to meet the urgent needs of aircrews in combat."<sup>3</sup> One aspect of CSAR operations that aircrew's knew they could rely on was the willingness of rescue forces to attempt the recovery, and for the service to prioritize CSAR missions over all other missions.

In a major reorganization, the Air Rescue Service, became the Aerospace Rescue and Recovery Service (ARRS) on 8 January 1966. The Joint Search and Rescue Center was incorporated into this new organization with responsibility for rescue operations in the Republic of Vietnam, Cambodia, Laos, Thailand, and most of North Vietnam.<sup>4</sup> From its beginnings until it cased its colors on January 31, 1976 the ARRS expanded its organization, incorporated modernized aircraft systems, modified tactical procedures (to include the use of armed escort fighters and development of a search and rescue task force), and concentrated on intensive aircrew training. Elite parajumpers, the link between the rescue force and the downed aircrew member, also were conceived and employed to improve CSAR efficiency and effectiveness.

During its involvement in Southeast Asia, the U.S. Air force lost 2,254 aircraft in combat and normal operations. Aircrew members killed, captured, or missing totaled 1,763. The ARRS saved a total of 3,883 lives, while losing 71 SAR personnel and 45 helicopters and fixed wing aircraft, a rate of 1 CSAR aircraft per 4.8 rescues and a SAR personnel loss rate of 1 per 5.2 rescues.<sup>5</sup> Following Vietnam the Air Force maintained an adequate CSAR capability until the late 1980's.

In 1987, the ARRS transferred the preponderance of its aircraft to the newly formed Special Operations Command to secure a larger

role for the Air Force in this new and important command. This left only seventeen aircraft dedicated to the peacetime search and rescue mission, the lowest since the inception of ARS in 1946. In August 1989, the new ARRS headquarters was established under the Military Airlift Command (Air Combat Command) to provide a dedicated, modern combat CSAR capability. This is a difficult task since many of the assets currently reside in the reserves, (59 of 80 aircraft) or belong to the special operations community.<sup>42</sup>

Navy search and rescue capability resided on carriers in the Gulf of Tonkin and by 1965 were incorporated under the Joint Search and Rescue Center at Tan Son Nhut, which exercised overall direction for search and rescue operations in the Republic of Vietnam. Naval CSAR operations were considered a success by many and "... one of the few bright spots of the Vietnam War".<sup>43</sup> This, however, is contested by C.E. Lassen who received the Medal of Honor for his actions as a Naval CSAR helicopter pilot, who states: "The Navy's experience with Combat SAR in North Vietnam was a classic example of 'how not to do it', we were totally unprepared, untrained, and with few assets. As a consequence, the TACAIR and helicopter community paid dearly".<sup>44</sup>

The Navy made 27 CSAR rescue attempts in North Vietnam; they lost 19 aircraft and 15 SAR personnel while only recovering one-in-six of the aircrew members.<sup>45</sup> Across the Southeast Asia theater of operations the Navy alone lost one rescue aircraft for every 1.4 overland rescues and lost one crewmember for every 1.8 rescues. A total of 109 aircraft (27 were helicopters and 82 were supporting fixed-wing aircraft) were lost on CSAR missions.<sup>46</sup> Over 75% of the fixed-wing aircraft were lost to ground fire from either small arms fire or antiaircraft artillery (AAA). "These statistics do not in any way question the heroism of the rescue crews... But they serve to point out the painful waste of human and material assets when

lessons once learned are subsequently relearned."<sup>47</sup>

The unacceptable attrition of CSAR assets proved that dedicated highly trained rescue and recovery forces were required. Helicopter Combat Support Squadron (HC 7) was the organizational answer to fill this critical void. From its inception (1967) as a dedicated CSAR asset, HC 7 rescued over 150 pilots without the loss of one aircrew member due to enemy action.<sup>48</sup> The results obtained by HC 7 illustrate the importance of a dedicated, responsive, highly trained force with the sole mission of CSAR. Following Vietnam, HC 7 was split into HC 1, an active squadron, and HC 9 a reserve squadron. In 1978, HC 1 was retired from the active force structure and its assets were transferred to HC 9. HC 9 was deactivated in June 1990, with responsibility for CSAR assumed by HCS 4 and HCS 5 (Helicopter Combat Squadron). The reserve component thus assumed responsibility for all Combat Search and Rescue operations. Perhaps a more condemnatory thought concerns Naval preparedness for today's CSAR role; as Cdr. Lassen (ret) notes; "The Navy is less prepared now for SAR than at the outbreak of Vietnam."<sup>49</sup> This trend is indicative of the CSAR mission capability resident in each service, not just the Navy.

The failure to assimilate previous lessons learned, an increasing threat capability, lack of inter-service coordination, and inadequate training and doctrine resulted in excessive losses in Vietnam.

"The most important lesson (from Vietnam) can be summed up in the concept of readiness. Peacetime forces must be ready to perform combat search and rescue in a variety of situations".<sup>50</sup>

As the Vietnam War ended and the need for CSAR decreased, so too did the cooperation and individual Service interest. CSAR was once again a victim of the budget and priorities battle- a stepchild that continues to demand attention. As Admiral Gilcrist testified

before the House Armed Services Committee investigating Survival, Escape, Resistance and Evasion;

"Coming out of Vietnam, having learned much about survivability of aircraft in a modern threat environment, but with a very constrained budget to work with, the Navy was really faced with a choice to either put its resources into improved survivability or to modernize its rescue capability. The Navy elected the former. . . In a restricted funding environment when the hard choices have to be made, it is by far preferable to put your money where it will keep your crews in their cockpits and off the ground."<sup>51</sup>

#### POST-VIETNAM

Two weeks after the evacuation of Saigon, May 12, 1975, Cambodian communist forces boarded and seized the American registered container ship SS Mayaguez and its crew in international waters near the Cambodian owned Poulo Wai islands located in the Gulf of Thailand. A rescue force consisting of eight HH-53's from the 3d Aerospace Rescue and Recovery Group and eight CH-53's from the 21st Special Operations Squadron was assembled on Utapao, in the Gulf of Thailand, to conduct the hostage rescue. On 15 May, under Presidential order, five CH-53's and 3 HH-53's (12 were eventually used) would shuttle up to six hundred Marines to capture the island of Koh Tang, where the crew was suspected of being held. The tragic result of this operation (the last engagement of the Vietnam War) was 15 KIA's, 3 MIA's, 30 wounded, 3 helicopters destroyed, and 9 damaged. Ironically, while the rescue was unfolding the crew of the Mayaguez was making its way seaward in a Thai fishing boat and was rescued by the USS Robert L. Wilson.<sup>52</sup>

The Mayaguez incident served to illustrate the high vulnerability of helicopters in the CSAR role. Recovery operations in high threat environments are extremely hazardous due to the helicopter's slow speed, large size, lack of sufficient armor

protection, and limited self defense capability. It also highlighted the value of training, "those HH-53 crews trained in CSAR tactics were twice as successful as the logistical support CH-53 helicopter crews".<sup>53</sup>

Desert One, the unsuccessful attempt to rescue the American hostages held in Iran, underscored the need for dedicated equipment and training to conduct special operations such as CSAR. RH-53D Navy minesweeper helicopters (because of their long endurance) were flown by Night Vision Goggle (NVG) qualified Marine Corps CH-53 pilots because there was not sufficient time to train the RH-53D pilots on NVG's, low level navigation, and hostile environment operations.<sup>54</sup>

Lebanon provides an example of the shifting importance of CSAR operations. In 1984, HC 9, the reserve squadron providing the Navy's only CSAR capability, had a detachment supporting air strikes in Lebanon. Recovery was made of all downed aircrewmembers, except Lt Goodman, whose picture quickly appeared on national media. His capture was used as a politicized statement when he was subsequently released during the Presidential campaign to Jesse Jackson, the rival candidate of President Reagan.

The recent Persian Gulf War provides another example of unpreparedness and the results of service reluctance to correct this known deficiency in operational capability. CINCCENT designated CENTAF as the theater CSAR coordinator; "In the high threat, Iraqi-controlled territory, Schwarzkopf firmly believed that he needed special crews to rescue downed pilots."<sup>55</sup> CENTAF, as the executive agent, established and operated the Joint Rescue Coordination Center (JRCC). CINCCENT, subsequently, tasked SOCCENT with responsibility for 24-hour, on-call CSAR for Coalition aircrews across Iraq, Kuwait, and an area that extended 12 miles into the Arabian Gulf where the Navy assumed responsibility. As noted earlier the ARS was

not prepared to assume the mission.

Equipment shortages such as PRC-112 radios, and limited special operations aircraft made recovery missions difficult. Of the 38 downed Coalition aircraft, only seven CSAR missions were launched; three of these were successful. Typical of the mission profiles flown was a 3/160th SOA mission conducted on 17 Feb 91. An F-16 pilot was shot down sixty miles north of the Iraqi-Saudi border, his chute was observed by his wingman and voice contact was established with him on the ground. CSAR crews from 3/160th received the recovery mission, launched under NVG's, established contact with AWACS orbiting overhead, and flew at twenty feet AGL and 140 knots to the downed pilots location. An infrared strobe guided the CSAR crew to the pilot's position. On-board special forces personnel provided local security and medical attention. The entire mission was monitored and tracked by the battalion TOC through the Target Information Broadcast System (TIBS), connected electronically into Rivet Joint. During egress, the aircraft was acquired, tracked, and fired upon by enemy air defense systems.<sup>56</sup>

As a consequence of using SOF aircraft for the CSAR role, and normal SOF mission requirements, these aircraft sustained one of the higher utilization rates in theater and had little room for contingency missions.<sup>57</sup> On one occasion, when no special operations capability was available, a CSAR mission was flown by the Army:

"Sometimes, however, conflicting missions prevented SOF aviators from accepting a CSAR mission. In one case, an Air Force F-16 pilot was shot down near Basrah. Although he suffered a broken leg, he managed to hide long enough to come up on the radio. When the CSAR request came into SOCCENT, Johnson had nothing available so he asked the other Service's if they could pick up the pilot. The Army said yes. . . Agreeing to take the CSAR mission, the battalion launched the UH-60 with two AH-64 escorts. . . The Iraqi's shot down the Blackhawk, which crashed almost directly into their position at about 130 knots and disintegrated."<sup>58</sup>

Of the eight on board, five were killed and three taken prisoner. "Our experiences in Operation Desert Storm . . . brought into focus the lack of capability and interoperability of service Combat Rescue Forces operating as an integral team".<sup>59</sup>

Other examples of post-Vietnam incidents where valuable CSAR lessons were learned (potentially) include: *Falklands* (1982), requirement for superior logistics and the capability to operate in Arctic conditions; *Grenada, Urgent Fury* (1983), no dedicated CSAR forces and significant helicopter losses against a relatively benign threat; *Beirut* (1986), Go/No Go criteria must be fully understood by rescue forces and accurate survivor location is critical before launch.<sup>60</sup>

The most recent example of helicopter vulnerability and the political impact of downed aircrews was played out on national media when CW2 Durant was captured by Somali gunmen while supporting an operation to capture Somali clan leader Mohammed Farrah Aidid, 3 October 1993. It was a tragic mission in which seventeen soldiers died, seventy-seven were wounded, one soldier was unaccounted for, and Durant was captured.<sup>61</sup> During the mission three helicopters were downed by intense small arms fire, machine guns, and rocket propelled grenades. "What they (Americans) did see were ghastly photos of a white body, naked except for green underwear- apparently the corpse of a downed helicopter crewman- being dragged through the street while Somalis kicked and stamped at him, plus TV footage of a terrified helicopter pilot, Michael Durant, being questioned by Somali captors".<sup>62</sup>

Eliot Cohen and John Gooch, in their book *Military Misfortunes*, provide a method for explaining military failure; "There are three kinds of failure: failure to learn, failure to anticipate, and failure to adapt. . . When two kinds of misfortune occur together we are in the presence of aggregate failure. . . When all three kinds

of failure occur together, catastrophe results." They go on to say that, "The failure to absorb readily accessible lessons from recent history is in many ways the most puzzling of all military misfortunes".<sup>43</sup>

The preceding fifty year history of failing to learn CSAR historical lessons, and the failure to anticipate future requirements, by definition, is aggregate failure. A policy of adapting to contingency CSAR requirements, instead of preemptively correcting the problem will continue to be costly in terms of aircrew lives and equipment.

#### JOINT DOCTRINE

"At the very heart of war lies doctrine. It represents the central beliefs for waging war in order to achieve victory. . . It is the building material for strategy. It is fundamental to sound judgment." <sup>44</sup>

During the Survival, Resistance, and Escape (SERE) hearings conducted by the House Arms Services Committee, Readiness Subcommittee, Mr Daniel (chairman) stated; "the time to keep faith with our service personnel is not after they are captured, but in providing the training, doctrine, and equipment to try to see that the capture never occurs in the first place".<sup>45</sup> The joint doctrine that is intended to answer the concerns expressed by Mr Daniel, while integrating the CSAR capabilities of each service into a joint command the theater CINC can employ was released as Joint Pub 3-50.2; Doctrine for Joint Combat Search and Rescue. This recent Test Pub (20 December 1991), assigns lead agent responsibility to the US Navy, while also setting forth doctrine and joint tactics, techniques, and procedures for the planning and conduct of joint combat search and rescue. It is authoritative but not directive.

Joint Publication 3-50.2 states that, "Joint Force Commanders

(JFC's) have primary authority and responsibility for CSAR in support of U.S. forces within their areas of responsibility (AOR's), including civilian personnel. . .<sup>66</sup> It goes on to outline the actions that JFC's will normally take to fulfill their CSAR responsibilities, these include:<sup>67</sup>

1. Joint Rescue Coordination Center (JRCC)- CINC's are required by a JCS memorandum (MCM 136-91, 8 August 1991) to establish a JRCC or functional equivalent, which is manned by personnel drawn from each joint force component. Recovery responsibility is normally delegated to the joint force components.
2. Control of CSAR Forces- JFC's normally exercise operational control (OPCON) of all forces committed to a joint CSAR.
3. Component Support- JFC's ensure that all joint force components support CSAR operations of the other components to the fullest extent practicable.
4. Adjacent Joint Force Commanders- JFC's need to provide mutual support in all matters of common concern to adjacent joint force commanders.

Basically, the JFC assumes total control of CSAR operations in his area of responsibility. Joint Pub 3-50.2 also provides the actions that Component Commanders of a joint force will normally follow in satisfying their responsibility to plan and conduct CSAR in support of their own operations in support of CINC war plans. These actions include:<sup>68</sup>

1. Rescue Coordination Center (RCC)- Component Commanders should establish an RCC to coordinate component CSAR activities and JRCC actions.
2. Mutual CSAR Support- Component Commanders are expected to provide mutual support to the CSAR operations of other components to the greatest extent possible.
3. Augmentation Personnel- Upon request of the JFC, component commanders need to provide an equitable share of personnel to staff the JRCC.
4. CSAR Tactics, Techniques, and Procedures- Component Commanders ensure that subordinate units and key personnel are familiar with joint force CSAR SOP's.

Service responsibilities are to provide forces capable of performing CSAR in support of its own operations, consistent with its assigned functions. They should also participate as soon as possible in the operation of the joint rescue coordination center and provide sufficient qualified personnel to ensure adequate and equitable manning of the

center." This serves to reinforce the primary role of the Component Commander. It is also clear that, although there is a degree of "jointness", the Services retain individual responsibility for providing a CSAR capability for their forces in theater.

An outgrowth of Vietnam incorporated into current doctrine is that, "Combat operations take precedence over CSAR operations. CSAR operations are subject to cost and benefit considerations and risk assessments in the same manner as any other military operation".<sup>70</sup>

One incident in Vietnam that highlights this sensitive issue was the Easter Sunday, 1972 rescue of LTC Iceal Hambleton, "Bat 21". When his EB-66 aircraft went down over North Vietnam, it initiated the greatest CSAR effort ever taken. Hambleton was eventually rescued by a Navy SEAL who infiltrated by sampan, but not before 17 U.S. servicemen lost their lives in the effort.<sup>71</sup>

Initial draft of Joint Pub 3-50.21, Joint Combat Search and Rescue (CSAR) Tactics, dated 15 April 1993, is under review/ comment by each of the Services. The intent of this manual is to provide a comprehensive JTTP as a guideline for successful CSAR in a variety of threat environments. It serves as a foundation to promote interoperability among services by outlining specific actions and methods for use in implementing joint CSAR doctrine. It also describes the employment of CSAR forces, to complement not supersede service guidance.

JCS Pub. 2, Unified Action Armed Forces (UNAAF), December 1986, also echoes the same service responsibilities as Joint Pub. 3-50.2; "Each service is responsible for providing forces capable of performing CSAR in support of its own operations, in accordance with its assigned functions. It assigns theater CINC's with responsibility and authority for CSAR in support of US forces within their areas of responsibility; enables them to delegate their authority to subordinate commanders, and requires them to establish a joint rescue coordination center.

An additional doctrinal manual which specifies CSAR procedures is

Multi-Service Procedures for Combat Search and Rescue, May 1991. This manual specifies, as the others do, that the CINC has primary authority and responsibility for US CSAR operations in support of "friendly forces within his area of responsibility", and that he may delegate his authority to subordinate commanders, the Coast Guard (by mutual consent), and military commanders of other commands (by mutual agreement).<sup>73</sup> The CINC is also given the authority to assign CSAR missions to forces not assigned but based or operating in the area. He may assume temporary operational control of these forces when they are not actively engaged in missions assigned by their own higher command.

Service responsibilities remain the same, to provide forces capable of performing CSAR in support of their individual forces assigned to the theater forces. The Multi-Service Procedures for Combat Search and Rescue manual also states that;

"Although the theater special operations command (SOC) is a component of a unified command, it must be viewed differently from other components due to its limited forces and competing missions. Special operations forces have some inherent CSAR capability that derives from some of their equipment (for example helicopters, small boats) and training. SOF can perform direct action personnel or equipment recovery missions. However, SOF are not easily redirected for CSAR missions because of other mission priorities."<sup>73</sup>

Tasking of SOF forces is appropriate when the operating environment requires the special capabilities of SOF, and when the priority of the person or persons to be recovered is sufficiently high to warrant the planning and execution of a special operation, according to the manual. It further explains that the Special Operations Command (SOC) is not a subset of the theater rescue structure, but it does have some unique capabilities, which may be employed to effect CSAR recovery.<sup>74</sup>

The use of SOF forces for CSAR is also addressed in the Initial Draft of Joint Pub 3-50.21, which states, "if the distressed personnel location is precisely known and the threat level exceeds the capabilities of the available recovery aircraft, a ground assisted recovery using a

Pararescue or SOF element evader may be employed";<sup>76</sup> it further notes that "distressed personnel should only expect a SOF aircraft to make a pick-up during a lull in SpecOps activities/missions".<sup>76</sup>

Doctrine for Special Operations, JCS Pub 3-05, states that, as with other military forces, certain SOF have the inherent capability to accomplish personnel recovery missions. However, SOF are not organized, equipped, or trained to conduct SAR or CSAR as continuing missions".<sup>77</sup> It also points out that special operations recovery missions differ from Service CSAR missions because they require detailed planning, rehearsal, and thorough intelligence analysis; they are not organized to respond in a minimum of time with dedicated assets and established C2 nets.<sup>78</sup>

The commander of the theater SOC within a unified command has some CSAR capabilities that are inherent in his force's equipment and training, although SOF are not specifically trained or equipped for CSAR. Since CSAR is a collateral mission, the equipment is not specifically designed for the CSAR task and special operations forces receive little (if any) CSAR-specific training. SOF will, generally, rescue their own forces when operating in environments which demand SOF capability.<sup>79</sup>

SOF should not be routinely tasked to perform conventional CSAR. However, in some circumstances SOF may be the only resource capable of personnel recovery from hostile, denied, or politically sensitive territory. When SOF is tasked to conduct specific CSAR missions then it is at the expense of other mission requirements and therefore contingent on the high priority of the person or persons to be recovered.<sup>80</sup>

#### SERVICE DOCTRINE

##### ARMY

The Multi-Service Procedures for Combat Search and Rescue manual states; "The Army has no dedicated CSAR units or aircraft. CSAR missions are secondary missions for rotary-wing aviation units, special operations

forces, and other units tasked by the unified commander."<sup>1</sup> However, Joint Test Pub 3-50.2 assigns the mission to MEDEVAC units; "medical evacuation units have the mission of CSAR for the Army. The units are being equipped with PLS's and will conduct CSAR in addition to other MEDEVAC operations."<sup>2</sup> CSAR remains a secondary mission for helicopter units, SOP, and other units tasked by the JFC because of insufficient rescue equipment.

Army forces deployed to a theater are expected to be capable of conducting self-supporting CSAR operations, the commander of the deployed force is responsible for the conduct of CSAR operations involving that force. Army aviation's role on the expanded battlefield includes rear, close, and deep operational missions. This increases the potential need for CSAR of downed aircrews. To provide this capability major aviation operations require the predesignation of CSAR aircraft, with minimum essential equipment and personnel on board, to rapidly react to downed aircraft.

The optimum time to execute a recovery is immediately after the incident. This is a decision the air mission commander makes based on the tactical situation, the potential cost in equipment and personnel, and the effect of the pickup on the mission. If an immediate recovery is not feasible, responsibility for CSAR operations passes to the owning unit commander. The unit commander or headquarters that controls a downed aircraft is expected to initiate rescue operations and if the tactical situation permits, to dispatch recovery personnel and equipment."<sup>3</sup> Command and control of the CSAR effort remains in Army channels until a request for support is accepted by the JRCC."<sup>4</sup>

Army aviation assets deployed to a theater are required to be familiar with joint CSAR procedures and possess detailed tactical SOP's covering CSAR procedures. FM 1-100, Army Aviation in Combat Operations states that Army Aviation must have dedicated CSAR forces, that it is a combat support mission, and that it requires specialized equipment which,

currently, only resides in special operations aviation units.<sup>65</sup>

Current doctrine and the example of Desert Storm illustrates the expanding utilization of Army for deep, cross FLOT operations. Medevac units are not capable of providing a viable CSAR capability for these type missions. They are not equipped, trained, organized, or capable of performing cross FLOT CSAR missions. This is NOT another MEDEVAC mission. Only the most benign air defense environment would permit MEDEVAC to conduct CSAR missions. The Army makes a great mistake in assuming MEDEVAC units can accomplish this difficult, hazardous mission. What injured soldier is not receiving MEDEVAC support while the CSAR is being conducted?

CSAR requires dedicated assets to provide 24 hour recovery capability. A CSAR unit must have crews on standby, crews resting, and crews preparing for the mission. A robust operations/intelligence staff section, properly equipped aircraft, and a singular focus is required to properly execute CSAR; history continues to reinforce this lesson; we, as in the past, fail to learn, or rather, yield to higher funding priorities. Army SOF, currently, provides the only "true" CSAR capability. SOF, like MEDEVAC is committed to a higher priority mission and is few in number. Essentially, the Army has no CSAR capability, other than individual unit recovery.

#### MARINE CORPS

\*The Marine Corps views CSAR as a secondary tasking which should not detract from primary functions. Marine Corps forces perform self-supporting recovery operations and external CSAR support through a concept known as Tactical Recovery of Aircraft and Personnel (TRAP). Marine Corp Air Ground Task Force (MAGTF) does not routinely train to conduct the search portion of CSAR, particularly in a medium to high air threat environment. The TRAP mission differs from CSAR in that it

usually does not involve extended air search procedures to locate possible survivors."<sup>66</sup>

US Marine Corps assault helicopters are not specifically configured for CSAR. The extra armor and extensive defensive armament required would reduce the troop and cargo carrying capacity of the aircraft. Although assault helicopters crews have skills related to CSAR functions, training time, by necessity, is allotted to assault support functions- not CSAR."<sup>67</sup> They do not have dedicated CSAR aircraft or trained aircrews, instead the Marine Air-Ground Task Force Commander (MAGTF) is held responsible for the conduct of TRAP operations involving his forces. TRAP missions will not supersede assigned mission objectives and resource requirements. Prerequisites for conducting a TRAP mission are that there must be reasonable assurance that the distressed personnel are alive, and the location of the personnel must be known."

TRAP matches the threat level with the recovery capabilities. Like the Army, the Marine Corps does not maintain designated CSAR platforms. The CSAR mission is also subordinate to the designated platforms primary mission- MEDEVAC in the Army, and heavy lift/transport in the Marine Corps. In effect, the Marine Corps like the Army, does not possess a CSAR capability. This provokes the question of how they expect to satisfy joint doctrine requiring each service to provide a CSAR recovery capability to the component commander deployed to support a theater CINC?

The MAGTF commander retains operational control of his organic air assets whose primary mission is support to the MAGTF ground combat element. If sorties are available they are offered to the JFC for tasking through the air component commander."

#### **NAVY**

The Navy redesignated CSAR as *Strike Rescue* to place increased emphasis on integrating rescue into all strike operations. The Navy

designates the senior member (officer in tactical command) of any deployed unit or group of units as directly responsible for conducting rescue and recovery operations for his own units. In most cases the carrier battle group commander is the officer in tactical command.<sup>90</sup> He establishes an RCT (rescue coordination team) as the planning and operations nucleus for the conduct and execution of all strike rescue operations.<sup>91</sup> The carrier wing is responsible for providing assistance in planning and executing all CSAR missions through the RCT.

The Navy uses rotary wing aircraft for direct recovery rescues and as platforms to insert and extract recovery forces. Most, however, lack the required survivability for today's high threat battlefield.

Squadrons equipped with HH-60H helicopters are trained to conduct day and night CSAR and naval special warfare operations in a hostile environment against small arms fire and infrared missiles. HS squadrons without HH-60H aircraft are limited to operations in a small arms environment only.

Organic battle group CSAR assets consist of selected CSAR-trained crews (three) within each carrier-based helicopter support squadron. HH-60 crews receive training in NOE and terrain flight, night vision goggle flight, electronic warfare, and naval special warfare. Helicopter Combat Support Squadrons (HCS) 4 and 5, which are LANTCOM and PACOM reserve units whose primary mission is Strike Rescue, have active duty personnel assigned to allow them to deploy some of their assets on short notice while Selected Reserve personnel are activated to deploy, if required. Because of the lack of dedicated battle group CSAR assets, organic assets within the aircraft CVBG are prioritized as; embarked HS squadron, embarked helicopter support light airborne multipurpose system (LAMPS) detachment, and other helicopter assets.

Overall, the Navy is attempting to address CSAR deficiencies through training of selected HS crews, investment in equipment, and maintaining a reserve capability. The focus of Strike Rescue in a hostile environment is to treat it like other combat missions. They have developed a GO/NOGO

decision matrix which matches the threat against recovery system capability. The Navy also employs their special operations forces, surface ships, and submarines to recover isolated personnel in an overwater environment.

The CVBG has limited CSAR capability against medium to high threat scenarios. By resigning their "true" recovery capability to the reserves it is extremely difficult to position the proper assets in theater for contingency operations in a timely manner. A cumbersome bureaucracy may prevent rapid deployment of specialized CSAR assets resident in the reserve. This is not a satisfactory doctrinal answer to the problem of providing "Service responsible" CSAR forces.

#### AIR FORCE

The Air Force has the only organization dedicated to CSAR operations- The Air Rescue Service (ARS), the same organization described earlier that was conceived in Korea in 1946 and has continued to evolve into its current organizational structure. The ARS is assigned to the new Air Combat Command (previously the Military Airlift Command). The ACC commander, through the ARS is responsible for organizing, training, equipping, sustaining, and providing operationally ready forces for CSAR operations.<sup>22</sup> The Air Force component commander normally exercises OPCON of assigned rescue forces through the Commander, Combat Rescue Forces.<sup>23</sup> The ARS is unique within the Service components because it is the only organization specifically designed, equipped, and trained to execute CSAR missions.

The ARS maintains trained pararescue forces with the capability for worldwide rescue and recovery of Air Force isolated personnel and material. They continue to provide a surface-to-air link for positive control, SERE expertise, emergency medical treatment, guidance to the aircraft commander for on-scene operations, and operation of aircraft

weapons systems.

The Air Force, due to the potential severity of the expected threat, the vulnerability of rescue resources, and the small size of the total Air Force rescue force, almost totally dedicates its assets to extracting isolated personnel from previously identified geographical locations. They are not normally employed in combat search. The use of recovery assets is generally restricted to no greater than a low-to-medium threat environment. Higher threats require rescue escort (RESCORT), known as SANDY, these are trained A-10 pilots in search procedures, authentication, and helicopter support tactics; rescue combat air patrol (RESCAP), which are dedicated fighters assigned CSAR support; and C2 assets such as AWACS or ABCCC.

The MH-60G PAVE HAWK is the primary USAF rescue and recovery platform. HC-130 aircraft are used for air refueling helicopters, inserting pararescue forces by parachute, and performing air mission commander duties. "Although all Air Force resources have the inherent capability to support CSAR operations, specially configured helicopters are the desired and standard recovery vehicle." All crews receive combat survival training and helicopter pilots, flight engineers, and pararescue receive underwater egress training before receiving CSAR initial or qualification training.

The ARS did not deploy to Desert Storm because they lacked the combat capability and equipment, many of their forces are in the reserves, and they maintained recovery responsibility at Patrick AFB, Florida, Iceland, and the entire PACOM area of operations. The ARS did eventually deploy personnel to operate in the JRCC, and the RCC's.

#### COAST GUARD

The CSAR role of the US Coast Guard is an extension of its peacetime mission. All Coast Guard cutters, aircraft, and boats are multimission

resources which can be considered potential CSAR resources. The Commander, Coast Guard Pacific Area and Commander, Coast Guard Atlantic Area are responsible to both USCINCPAC and USCINCLANT for overall coordination of maritime CSAR with their respective areas of responsibility. As CSAR coordinators, the Coast Guard area commanders are specifically charged to establish and operate JRCC's for these two unified commands. In wartime, all existing Coast Guard operations centers continue to function in their present locations and will retain their RCC capabilities and functions.

The Coast Guard provides personnel who, along with Department of Defense personnel, staff five deployable JRCC's operating outside the continental US. A primary mission for the Coast Guard during peacetime is SAR planning and coordination. They are also employed in a multimission concept, that is, they are prepared to execute different missions on the same sortie. Coast Guard wartime tasking is divided into two categories, normal peacetime functions and responsibilities, and military functions as tasked by the Chief of Naval Operations in the "Navy Capabilities and Mobilization Plan".<sup>5</sup>

#### JOINT AND SERVICE DOCTRINE CONCLUSIONS

If "the whole is greater than the sum of its parts", and joint means, basically, that no single service reaches its full potential unless employed with complementary capabilities of another service, then CSAR must become a joint team player and not a service parochial mission. Combat Search and Rescue capability in the US military is deficient. Previous conflicts yield valuable lessons learned concerning equipment, training, tactics, organization, and doctrine. Perhaps the greatest lesson is simply that a highly trained CSAR force is required at the outset of hostilities. This problem will not correct itself. The current "Service responsibility" policy of training, equipping, and

organizing CSAR forces was dysfunctional in Desert Storm, yet it remains "the doctrinal answer, a "business as usual" approach.

Each doctrinal manual explains that services are responsible for supporting their own CSAR operations. In reality CSAR is not JOINT, regardless of the amount of "jointness" apparent in the joint CSAR publications. Consider the following quote from Joint Test Pub 3-50.2; "Deployed Service forces may have little organic CSAR capability but may be tasked to provide certain CSAR-capable resources in support of another Service force. . . Such assignments must not interfere with a unit or component primary mission and must be tasked by appropriate authority, normally a superior officer." Joint appears to be overcome by Service parochialism.

Theater CINC requirements are not adequately addressed, nor do they appear to be a priority. The CINC depends on the Services to provide a component CSAR capability in his theater of operations in accordance with doctrine. This capability was not available in Desert Storm which required special operations aviation elements to assume the mission at the exclusion of other SOF missions. If SOF assets had been fully employed in Desert Storm/Shield, it is doubtful if SOA could have satisfied both mission requirements. JCS Pub 2 fails to address CSAR from the CINC's perspective and instead focuses on Service requirements. Since CSAR is ultimately the CINC's problem, it is clear that a solution must adequately address theater CSAR requirements.

CSAR forces must be capable of rapid deployment (active), equipped with state-of-the-art aircraft (FLIR, GPS, INS, PLS, in-flight refuelable, satellite communications, HF, ASE etc), and organized, trained, and funded to perform CSAR correctly.

Conclusions are clear, if the services fail to recruit, organize, equip, and train adequate CSAR forces to provide the theater CINC's, then a problem exists which he inherits and can do little to rectify. The CINC will continue to find his component CSAR capability in theater

ill equipped, poorly trained, and not mission capable. The result will inevitably be to task SOCOM, which significantly degrades special operational capabilities. The significance of this issue is increasing as our National Military Strategy shifts from a cold war threat to a regionally based, "come-as-you-are" strategy.

In this era of "jointness", constrained resources, congressional desire to eliminate overlapping capability, and changing geopolitical environment, can the US military services make the necessary changes or will Congress ultimately legislate action? Four possible alternatives are considered.

#### ALTERNATIVES

"No matter where we fight in the future, and no matter what the circumstances, we will fight as a joint team."<sup>7</sup> With this as the "bottom line" four options are presented as potential solutions to the CINC's dilemma. First, the mission could be assigned to SOCOM, similar to Desert Storm; second, a Joint CSAR Command, which would consolidate all CSAR assets independent of Service control, could be formed; third, responsibility for the CSAR mission could be assigned to one Service; and fourth, CSAR could remain "status quo".

There are additional issues which directly impact on CSAR but require separate consideration, such as; the force multiplying affect of a successful rescue on morale and esprit; insufficient aerial refueling tankers (HC-130 and MC-130), inadequate force structure; constrained resources; active versus reserve debate; peacetime SAR responsibility; and a threat environment which is unclear, poorly defined, and constantly changing. These factors, while important, are beyond the scope of this paper. They are considered as "givens", which affect each option the same.

### ASSIGN THE CSAR MISSION TO SOCOM

The major argument from the SOF community has been that without additional assets and funding, their primary warfighting mission areas would suffer if given this additional responsibility. Now that SOC is a unified command, it no longer has to rely on the individual Services for funding, although if assigned CSAR, they would require an increased budget authorization. The SOCOM position is that CSAR is a mission that is not in the mission statement for the command, requires considerable SOF assets to accomplish, and ultimately has significant impact on the readiness of the command.<sup>99</sup>

As Desert Storm highlighted, no Service had the assets or organization to conduct CSAR. Special operations aviation; however, proved capable of performing the detailed planning, was equipped with the specialized airframes required (with some modifications such as increased ECCM, and hoists), and was trained in a similar mission.

Assigning the mission to SOA does not correct the problem. They must receive additional airframes, pilots, and dollars to constitute a dedicated CSAR capability. Current SOA requirements are tremendous; the additional CSAR mission would overburden SOA and limit their ability to perform their primary role, without additional resources.<sup>99</sup>

To adequately meet the CINC's requirements a rescue force must be: organic to the CINC's assigned forces and within the CINC's AOR to facilitate rapid response; capable of operating in the same environment as the striking force; able to perform effectively in joint or combined operations; and be well trained and equipped. A force not totally dedicated to CSAR would have difficulty in meeting these requirements.<sup>100</sup> SOCOM special operations aviation forces can meet this standard.

This option benefits the Navy in contingency deployment situations, since it does not maintain an active special operations aviation element that could assume the responsibility until HCS 4/5 could deploy. The

Army and Marine Corps, who have no "true" CSAR capability, also benefit under this option. The USAF would be required to give all ARS assets to SOCOM under AFSOC control. They could form a nucleus from which to build a CSAR capability, as a separate directorate under SOCOM. Indirectly, the USAF would still retain influence; however, command and control would rest with SOCOM.

This would place responsibility for CSAR under one major command, consolidate logistics, and provide the theater CINC with a genuine CSAR capability. The disadvantages are that a force structure change is required, the CSAR mission may become secondary to SOF missions unless adequately resourced, and present doctrine separating SOC from responsibility for the CSAR mission must be amended.<sup>101</sup>

#### ESTABLISH A JOINT CSAR COMMAND

A single, joint command responsible for organizing, equipping, training, and controlling search and rescue forces, during combat and peace, would provide a theater CINC with a responsive, capable force and an established command and control structure. The Services would transfer their assets to the Joint CSAR Command, which could be established under SOCOM or ACOM, who would then support the theater CINC.

This option develops a single advocate for CSAR, ensures that funding is provided to upgrade systems and capabilities, prioritizes and standardizes incorporation of technology, reduces redundancy, develops a common doctrine, ensures pilot standards are maintained, puts the mission above service parochialism, ensures limited (decreasing) resources are used efficiently, and it provides the theater CINC with a viable CSAR capability. This option would eliminate the requirement for an RCC; the JRCC would become the responsibility of the Joint Combat Search and Rescue Commander.

Concerns associated with this option include; the establishment of a

joint command requires Secretary of Defense authorization which may be difficult to get in a period of diminishing Congressional support; overhead costs of running, manning, and equipping the command are high; service transfer of assets and subsequent loss of control among the Services would require strong CJCS and SecDef support to implement.

#### ASSIGN CSAR TO ONE SERVICE

Responsibility for the combat search and rescue mission could be assigned to one Service. This option assigns responsibility, but does not ensure availability of a trained, properly equipped force. In the budgetary battles that are ongoing and those projected in the out years, CSAR may continue to be a low funded item. The Service has competing resource demands, and since CSAR is a secondary mission, fiscal resources can be expected to go to the primary mission first. This option, has two possible alternatives- assign the mission to the Army, or to the USAF. The Navy would retain overwater CSAR responsibility in the vicinity of the CVBG.

The CSAR mission could be assigned to the Army, modeled after the 160th Special Operations Aviation Regiment. This option would consolidate helicopters in the Army, in effect, getting the USAF out of helicopters entirely. This accrues certain efficiencies of scale, such as maintenance, training standardization, and equipment compatibility. As Desert Storm demonstrated, the Army SOA "mission first" approach ensures a dedication to accomplish the mission that is unsurpassed by any other service. Army SOA leadership is a product of the Army education system and fully understands the "ground" mentality of the Corps or Division commander who (probably) owns the terrain where the aircrew bailed out. Recovery planning is more closely coordinated, integrated, and complementary than it would be otherwise.

Assigning the CSAR mission to the USAF is also positive in many

respects. USAF intelligence, oriented on the air threat, is much better than the Army developed intelligence which tends to focus, understandably so, on the ground threat. A more complete, integrated picture of the air defense threat is produced within the USAF. USAF weather planning capability is greater and more easily obtained than at Army corps level. In addition, the USAF already has a dedicated recovery capability resident in the ARS which could be expanded, resourced, and capable of performing the CSAR mission. The ARS also has pararescue forces, rescue support aircraft, rescue combat air patrol, and airborne command and control. USAF fixed-wing pilots, which constitutes the greatest potential of overland rescue requirements, and helicopter pilots progress through the same education system, are collocated at the same locations, and train together on major exercises.

This option does not require transferring assets because no service, except the USAF, has a dedicated CSAR capability. US Army SOA remains in the Army. The infrastructure requirement is minimized, essentially because the necessary organizational structure already exists, the ARS structure is simply expanded to cover the additional requirements. This option would require the USAF to fully commit to properly funding and supporting the CSAR mission. Investments in additional airframes, tankers, and recovery equipment would be required- the same as all the options, including "status quo". Another consideration is using assets from SOCOM to conduct specialized recovery operations beyond the capability of the ARS.

#### THE "STATUS QUO" OPTION

The final option is to continue along the same path that has marked our way the last fifty-plus years. This option, the one of apparent choice, is to require the Services to organize, train, and equip a viable CSAR force that can provide a theater CINC with the recovery capability

the Air Wars of future conflicts will require, regardless of their scale or intensity. This option failed during Desert Storm, and will fail during our next conflict, unless preemptive planning, adequate resources, and command interest are applied today.

If this option is selected, ie; if budgetary pressures are acquiesced to, then the lessons will once again be purchased with American aircrew lives. Special operations aviation can not do the mission without detriment to its SOF responsibilities. They must receive additional specialized aircraft, crewmember authorizations (above a 1 pilot to 1 seat ratio), and funding; if tasked to provide CSAR support to a theater CINC, none of which is expected in the near term.

CSAR requires dedicated support. SOF missions also require dedicated support. Many times on infiltration missions a crew must rapidly return to recover a compromised SOF team, sometimes within a few minutes. The US can not afford NOT to have a dual capability- CSAR and SOA.

Training must be reinforced at the individual pilot level to preclude the same problems encountered during Desert Storm. Pilots were unfamiliar with SPIN's (specialized instructions) pertaining to recovery operations, did not have adequate SERE training, were using the wrong radios, were not familiar with PLS (position locating system), and were unfamiliar with the CSAR system in general. These observations were after three months of preparation, a time factor we can not depend on in the future.

#### CONCLUSIONS

Currently, there is no joint agency- only separate services managing issues based on service priorities. Making CSAR primarily a service responsibility and not a joint agency free of Service parochialism condemns CSAR to atrophy in peacetime and to separate, generally less

coordinated efforts in wartime.<sup>102</sup> Unity of effort is non-existent in wartime, the JRCC does not control any assets, it simply coordinates the assets of the separate commands which results in less effective operations. In Desert Storm, the JRCC also did not have launch authority, this important authority rested in SOCOM, specifically AFSOC.

Regardless of the option selected the current force structure is insufficient to accomplish the mission in sustained operations. This becomes even more important when considering the Bottom Up Review requirement of fighting and winning two nearly simultaneous major regional contingencies with overwhelming force and minimum casualties. There are not enough tankers (HC-130/MC-130), specialized aircraft, or dollars available to provide the theater CINC with a viable CSAR force<sup>103</sup>. Many of the current rescue aircraft are Vietnam era machines without electronic countermeasures, night capability, self-protection, sufficient on-station time, or proper recovery equipment. Additionally, many of the assets are in the reserve which does not support a regional based contingency strategy.

It is clear that a theater CINC requires a highly trained, rapidly deployable, CSAR force with an established command and control structure. They can not be ad-hoc organizations, poorly trained, and ill-equipped; or they will not survive. Current joint doctrine is adequate but the Services have failed to provide adequate assets to support theater CINCs.

The recommended solution from this study lies in assigning responsibility for the CSAR mission to SOCOM, fully resourcing the ARS, and providing additional funding to SOCOM to offset initial organizational realignment requirements. The ARS would be transferred to SOCOM, redesignated as a sub-unified command, and properly resourced to perform both the peacetime and wartime CSAR support requirement. This would eliminate duplication of effort across the Services and would empower the JRCC in wartime as a SOCOM responsibility with augmentation from the Services. It also eliminates the RCC requirement which

streamlines procedures.

This recommendation provides for unity of command, a close liaison with a complementary capability, and standardized tactics and training. It also establishes CSAR as a primary mission outside the purview of a Service interest. The organization could be modified to parallel current SOA design if required. It could more easily incorporate technological advancement as a single agency responsible for CSAR. Advancements such as radar transponders that JSTARS can accurately locate and then through data link provide essential information, improved FLIR III systems, enhanced electronic countermeasures, and improved communications.

As a Unified Command with functional responsibilities not bounded by any single area of operations, SOCOM maintains a world-wide focus, a direct liaison with regional commands, and an infrastructure to support mission requirements. This infrastructure consists of communications, personnel, operational experience, and limited essential equipment (PACOM and EUCOM maintain HC-130 aerial refueling tankers). A separate CSAR command structure would not be required.

With the ARS redesignated under SOCOM, it becomes easier to coordinate, in a responsive manner, missions which require SOA aircraft. This option also consolidates helicopter operations under one command, effectively eliminating them from the USAF inventory. CSAR is no longer a collateral mission, as a sub-unified command under the Commander SOCOM, as it currently is in the Army and Marine Corps. It is also readily deployable, and not dependent on the reserves (Navy and Coast Guard) which require activation. This option is the only one which provides a high threat recovery capability which only SOA can accomplish. The Services only maintain a low to medium threat capability.

Combat Search and Rescue is a theater CINC's problem, the nation's crisis, and the Services blindspot. It is a cyclical lesson of history that we refuse to learn, or worse, we consciously ignore or refuse to adequately address in the interest of budgetary line items. Regardless

of why, it remains a problem today; it is a vital interest of commander's and this nation.

During conflicts, rescue operations consume a disproportionate amount of attention in military, political, and national channels. Several reasons for this are; our western tradition values the sanctity of human life, particularly a fellow American; a rescued aircrew member returns a valuable asset which is reusable (about 2 million after an attack pilot completes his first ten flights); a prisoner of war provides the enemy with a source of possible intelligence as well as a political asset; and aircrew members morale and aggressiveness increase if he knows every effort will be expended to rescue him.<sup>104</sup>

The National Military Strategy demands a flexible, responsive CSAR capability be resident in the current active force structure. Fifty years of historical hindsight have demonstrated that CSAR is a national priority which can not be ignored. Theater CINC's must emphasize CSAR as a critical requirement on their Integrated Priority List (IPL) submitted annually to the JCS.

Now is the time to fix the problem. CSAR should not be a lesson the US fails to learn!

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